REMARKS

Entry of the foregoing, re-examination and reconsideration of the subject matter identified in caption, as amended, pursuant to and consistent with 37 C.F.R. §1.112, and in light of the remarks which follow, are respectfully requested.

The claims have been amended and are now specific to the elected species of solid polymer electrolytes where the polymer is a three-dimensional copolymer of methacrylonitrile, a cross-linkable comonomer selected from glycidyl acrylate or methacrylate and optionally, a comonomer providing internal plasticization and/or a comonomer having an ionic functional group. Claims 1, 5, 14, 38-42, 48 and 49 remain pending in this application.

Claims 1, 5, 14, 38 and 39 were rejected under 35 U.S.C. §102(b) as anticipated by U.S. Patent No. 4,187,353 to Schroeder for the reasons given in paragraph (5) of the Office Action. Reconsideration of this rejection is requested in view of the above amendments and for at least the following reasons.

Schroeder '353 is directed to the preparation of foamable copolymers of methacrylonitrile and acrylic acid salts. This reference does not disclose the preparation of polymer electrolytes, let alone solid polymer electrolytes comprising three-dimensional copolymers of methacrylonitrile. More particularly, Schroeder '353 does not disclose cross-linked methacrylonitrile copolymers of glycidyl acrylate or methacrylate in the form of solid polymer electrolytes as now claimed.

Accordingly, the §102(b) rejection over Schroeder '353 should be withdrawn. Such action is earnestly requested.

Claims 1, 5, 14, 16 and 38-42 were rejected under 35 U.S.C. §102(b) as anticipated by JP 62219469 for reasons given in paragraph (6) of the Office Action.

Reconsideration of this rejection is requested in view of the above amendments and the following remarks.

JP '469 (Abstract) teaches the use of polymethacrylonitrile as a gelling agent for an electrolyte. The Abstract does not disclose solid polymeric electrolytes where the polymer is a three-dimensional copolymer of methacrylonitrile and glycidyl acrylate or methacrylate. As such, this document fails to anticipate or render obvious any of the currently pending claims.

For at least the above reasons, the §102(b) rejection over JP '469 should be reconsidered and withdrawn. Such action is respectfully requested.

Claims 1, 5, 14 and 38-42 were also rejected under 35 U.S.C. §103(a) as obvious over U.S. Patent No. 5,658,686 to Akashi et al. for reasons set forth in paragraph (7) of the Office Action. Reconsideration of this rejection is requested in view of the above amendment and for at least the reasons which follow.

The Office Action acknowledges that Akashi '686 does not disclose polymer electrolytes where the polymer is derived from methacrylonitrile. Applicants have previously pointed out the disadvantages associated with using acrylonitrile in preparing polymer electrolytes and the unexpected advantages and properties attained by using methacrylonitrile polymers. Note pages 7-13 of the Response filed November 19, 2002.

Moreover, Akashi '686 does not mention the use of glycidyl acrylate or methacrylate as a cross-linkable comonomer. Clearly, this document fails to suggest a solid polymer electrolyte as presently claimed.

For at least these reasons the §103(a) rejection over Akashi '686 should be withdrawn. Such action is respectfully requested.

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order and such action is earnestly solicited. If there are any questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned at (703) 838-6683 at her earliest convenience.

Respectfully submitted,

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